State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 98-047

NPDES NO. CA0053953

WASTE DISCHARGE REQUIREMENTS FOR CITY OF LOS ANGELES (Los Angeles-Glendale Water Reclamation Plant)

The California Regional Water Quality Control Board, Los Angeles Region (hereafter Regional Board), finds:

Regulation of Discharge

1. The City of Los Angeles (hereafter City or Discharger) discharges waste from the Los Angeles-Glendale Water Reclamation Plant (hereafter Los Angeles-Glendale Plant or Plant) under Waste Discharge Requirements (WDRs) contained in Order No. 95-075 adopted by this Regional Board on June 12, 1995, and amended on April 13, 1998 to incorporate new chloride limits. This Order serves as the National Pollutant Discharge Elimination System (NPDES) permit (NPDES No. CA0053953).

2. The Regional Board is in the process of implementing a Watershed Management Approach to address water quality protection in the Los Angeles River watershed. Accordingly, the Regional Board is reviewing the WDRs and NPDES permits for the facilities that discharge wastes to the Upper Los Angeles River (including Los Angeles-Glendale Plant). As a result of the review, this new Order is prepared to replace the Order No. 95-075 adopted on June 12, 1995.

3. The Los Angeles-Glendale Plant is jointly owned by the City of Los Angeles and the City of Glendale. The Plant is located at 4600 Colorado Boulevard, Los Angeles, California, and treats wastewater generated from the Cities of Glendale, Burbank, Los Angeles, La Canada-Flintridge, and from Los Angeles Zoo. Figure 1 shows the location map of the Plant. The Los Angeles-Glendale Plant is a tertiary wastewater treatment plant, that treats municipal wastewater from domestic, commercial, and industrial sources. The treatment design capacity of the Plant is 20 million gallons per day (mgd). In 1997, the average annual flow was 13.9 mgd. The Los Angeles-Glendale Plant discharges the treated wastewater to the Los Angeles River.

4. A portion of the treated wastewater is used for irrigation and industrial uses. The use of reclaimed water is regulated under Water Reclamation Requirements contained in Orders No. 97-072, No. 86-016, and No. 79-156.

5. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified the discharge from the Los Angeles-Glendale Plant as a major discharge.

Description of the Facility

6. In 1968, the cities of Los Angeles and Glendale entered into a joint powers agreement to conduct a feasibility study for the treatment plant. The Los Angeles-Glendale Water Reclamation Plant was constructed in the early 1970s. By 1976 the plant began operation, and in 1986 the plant was operating at full capacity.

7. The Los Angeles-Glendale Plant is one of the upstream plants of the City's Hyperion Treatment System. The wastewater is taken by the Los Angeles-Glendale Plant from the North Outfall Sewer line. In case of plant operational problems or a need for plant shutdown, wastewater can be diverted back to the North Outfall Sewer which flows to the Hyperion Treatment Plant for treatment. Similarly, during emergency conditions elsewhere in the Hyperion Treatment System, the Los Angeles-Glendale Plant may be able to process flows in excess of 20 mgd for short time periods without exceeding effluent limitations.

8. Treatment at the Los Angeles-Glendale Plant consists of bar screening, primary sedimentation, biological treatment using activated sludge with fine pore aeration, secondary clarification, coagulation, mixed dual media filtration, chlorination and dechlorination. See figure 2 for the plant flow diagram.

9. Sludge from the primary and secondary processes, as well as wastes from other sidestreams, are returned to the North Outfall Sewer line for treatment at the Hyperion Treatment Plant. The grit and solids separated by screening are sent to a landfill.

10. Storm water in the Los Angeles-Glendale Plant is collected by a storm drain that is tied into the final effluent surge chamber.

Discharge Quality

11. Over the past five years (1993 through 1997), the average annual removal of BOD and total suspended solids has been 97% and 97.8%, respectively. The median daily total coliform was 1.8 MPN/100 ml in the effluent. The average annual flow rate of the treated wastewater discharged into the Los Angeles River was 13.15 mgd.

12. The characteristics of the treated wastewater discharged into the Los Angeles River in 1997 are as follows:

Constituent	Unit	Annual Average	Minimum Monthly Avg.	Maximum Monthly Avg.
Flow	mgd	13.8	6.5	21.7
pH	pH units	7.1	6.7	7.5
Temperature	°F	76	--	85
BOD_5 20°C	mg/L	5.0	--	12.1
Suspended solids	mg/L	2.9	--	7.6
Settleable solids	ml/L	<0.1	--	0.1
Total dissolved solids	mg/L	577	534	672
Turbidity	NTU	--	--	6
Total chlorine residual	mg/L	<0.01	--	--
Sulfate	mg/L	131	113	163
Chloride	mg/L	132	112	150
Total coliform	CFU/100ml	<1	--	2
Oil and grease	mg/L	0.5	--	5.0
Ammonia-N	mg/L	--	--	21.3
Nitrate-N	mg/L	2.7	0.9	4.7
Nitrite-N	mg/L	0.6	<0.01	1.0
Organic nitrogen	mg/L	2.1	1.2	3.0
Total nitrogen	mg/L	18.7	16.0	21.0
Nitrite-N+Nitrate-N	mg/L	3.3	1.8	5.2
Boron	mg/L	0.6	0.5	0.7
Fluoride	mg/L	0.9	0.4	2.9
MBAS	mg/L	0.1	0.1	0.2
Barium	mg/L	0.026	0.011	0.035
Iron	mg/L	0.082	0.020	0.190
Cyanide	mg/L	0.005	--	0.013
Chronic toxicity	TU_c	--	<1	>10

Los Angeles-Glendale Plant Discharge Outfall and Los Angeles River

13. The Los Angeles-Glendale Plant discharges the treated wastewater to the Los Angeles River, a water of the United States, at a point about 1,400 feet downstream of Colorado Boulevard (latitude 34°8'25", longitude 118°17'24"), in the Los Angeles River narrows, above the river estuary.

14. The Los Angeles-Glendale Plant outfall is located at the Los Angeles River narrows, at a section known as the Glendale Narrows. In this area, the river is a rocky, unlined bottom

with concrete-lined or rip-rap sides. In the river bed, willows, sycamores, and cottonwoods provide habitat for birds and other wildlife. When the ground water is high in the San Fernando Valley basin, the area is fed by natural springs. Many trails and paths along the river in this area are heavily used by the public for hiking, horseback riding, and bird watching. From the narrows, the Los Angeles River flows through downtown Los Angeles and the coastal plain to discharge into San Pedro Bay east of Long Beach Harbor.

Watershed Approach

15. This Regional Board has implemented a Watershed Management Approach to address water quality protection in the Los Angeles Region. The objective is to provide a comprehensive and integrated strategy resulting in water resource protection, enhancement, and restoration while balancing economic and environmental impacts within a hydrologically-defined drainage basin or watershed. The Management Approach emphasizes cooperative relationships between regulatory agencies, regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. This Order fosters the implementation of this approach by protecting beneficial uses in the watershed and requiring the City to participate in the implementation of a regional monitoring program.

16. Pursuant to this Regional Board's watershed initiative framework, the Los Angeles River Watershed Management Area is the targeted watershed for fiscal years 1997-1999. The Los Angeles River watershed encompasses an area of about 825 square miles. Of those, approximately 324 square miles are covered by forest and open space land within the Angeles National Forest, the Santa Monica Mountains, the Verdugo Mountains and Griffith Park in the Upper watershed. The rest of the watershed is highly developed. The urban area in the upper watershed consists mostly of residential and commercial areas, while the area in the lower watershed consists of industrial, residential and commercial areas.

Waste Discharge Requirements and their Bases

Basin Plan

17. On June 13, 1994, this Regional Board adopted a revised *Water Quality Control Plan, Los Angeles Region: Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains beneficial uses and water quality objectives for the Los Angeles River.

Beneficial Uses

18. The beneficial uses of the receiving water are:

Los Angeles River upstream of Figueroa Street - Hydrologic Unit 405.21

Existing: ground water recharge; contact and non-contact water recreation; warm freshwater habitat; wildlife habitat; and wetland habitat.
Potential: municipal and domestic supply[1]; and industrial service supply.

Los Angeles River downstream of Figueroa Street - Hydrologic Unit 405.15

Existing: ground water recharge; contact[2] and non-contact water recreation; and warm freshwater habitat.
Potential: municipal and domestic supply[1]; and industrial service supply.

Los Angeles River downstream of Figueroa Street - Hydrologic Unit 405.12

Existing: ground water recharge; contact[2] and non-contact water recreation; warm freshwater habitat; marine habitat; wildlife habitat; and rare, threatened, or endangered species.
Potential: municipal and domestic supply[1]; industrial service supply; industrial process supply; migration of aquatic organisms; spawning, reproduction, and/or early development; and shellfish harvesting[2].

Los Angeles River Estuary - Hydrologic Unit 405.12

Existing: industrial service supply; navigation; contact and non-contact water recreation; commercial and sport fishing; estuarine habitat; marine habitat; wildlife habitat; rare,

[1] Municipal and domestic supply designations under State Water Resources Control Board Order No. 88-63 and Regional Board Resolution No. 89-003.
[2] Access prohibited by Los Angeles County Department of Public Works.

threatened, or endangered species[3]; migration of aquatic organisms[4]; spawning, reproduction, and/or early development[4]; and wetland habitat.

Potential: shellfish harvesting.

The requirements in this order are intended to protect designated beneficial uses and enhance the water quality of the watershed.

Pollutants of Concern and Impairments

19. The 1996 State Water Resources Control Board's (SWRCB) *Water Quality Assessment Report* identified the water quality condition of water bodies in the Los Angeles Region. In the Los Angeles River, the following beneficial uses were determined to be either impaired or threatened to be impaired: aquatic life, contact and non-contact recreation. The report also identified that the quality of the water is impacted by bacteriological contamination (coliform count), heavy metals (lead and silver), ammonia, nitrogen, nutrients (algae), oil, pH, total dissolved solids, chloride, turbidity, trash, scum, and odor.

Human Health

20. There is public contact in the downstream areas of the receiving water; therefore, the quality of wastewater discharged to the Los Angeles River must be such that no public health hazard is created.

Nutrients

21. The Federal Clean Water Act requires that each state provides a list of impaired surface waters (303(d) list). Water bodies on the 303(d) list must have Total Maximum Daily Loads (TMDLs) established.

The Los Angeles River is included in the 303(d) list due to ammonia and nitrogen pollution. The Regional Board has conducted a TMDL which assessed the extent of the ammonia and total nitrogen problem and sources in the Los Angeles River during dry weather conditions. The draft Los Angeles River nitrogen TMDL proposes future effluent limits for the existing POTWs which will result in achievement of Basin Plan objectives in the river. The

[3] One or more rare species utilize all ocean, bays, estuaries, and coastal wetlands for foraging and/or nesting.

[4] Aquatic organisms utilize all bays, estuaries, lagoons, and coastal wetlands, to a certain extent, for spawning and early development. This may include migration into areas which are heavily influenced by freshwater inputs.

proposed effluent limits for the Los Angeles-Glendale Plant are:

Total nitrogen 10 mg/L
Ammonia-N 5 mg/L

The Discharger will have until the year 2002 to: (a) meet the Basin Plan objective by making the necessary adjustments/improvements to meet the above limits, or (b) conduct studies leading to an approved site specific objective for ammonia.

22. Phosphorus also contributes to the algae growth in the Los Angeles River, this permit contains provisions to monitor the amount of phosphorous that the Los Angeles-Glendale Plant discharges into the Los Angeles River.

23. The City will conduct pilot scale studies to determine the most appropriate process modifications to achieve nitrogen control, including ammonia and total nitrogen reductions. During these short term studies and subsequent implementation phases, the City will have exceedances of their nitrite limit. This Order contains provisions to deal with nitrite while the City conducts such studies.

Methyl Tertiary Butyl Ether

24. Methyl Tertiary Butyl Ether (MTBE) is a major component of gasoline and has been detected in drinking water wells throughout California. The threat to human health from MTBE is being evaluated at this time by the USEPA and the California Department of Health Services.

Toxic Constituents

25. Numeric toxic constituent limitations are prescribed for this discharge pursuant to the narrative water quality objective in the Basin Plan for toxic constituents and 40 CFR Part 122.44. The numeric toxic limitations are based on Basin Plan Objectives, USEPA's Water Quality Criteria, and the National Toxics Rule.

For toxic constituents that have not been consistently detected in the effluent and have been determined to have no reasonable potential for causing or contributing to excursions in water quality objectives, no numerical limitations are prescribed. Instead, a narrative limit to comply with all water quality requirements is provided in lieu of such numerical limitations.

Performance Goals

26. The Regional Board has implemented the Water Quality Task Force[5] recommendations on the use of performance goals, rather than performance-based limits, when appropriate. The use of performance goals is intended to minimize pollutant loadings and at the same time maintain the incentive for future voluntary improvement of water quality wherever feasible, without fear of being punished with more stringent limits based on improved performance. This Order contains performance goals.

The performance goals require the Discharger to maintain its treatment efficiency while recognizing normal variations in treatment plant operations, influent quality, and sampling and analytical techniques. This approach, however, does not address substantial changes in operations that may occur in the future and could affect the quality of the treated effluent. As such, this Order provides that performance goals may be modified by the Executive officer, if warranted. The listed effluent performance goals are not enforceable limitations or standards.

27. The performance goals prescribed in this Order are based on the following:

(a) For pollutants which have been detected in the effluent, performance goal of a constituent is statistically set at the 95th percentile confidence level of the January 1993 through December 1997 monitoring data. Therefore, it is expected that one sample in twenty may exceed the goal during normal plant operation in the long-term.

(b) For other pollutants whose monitoring data have consistently showed nondetectable levels, or which have been occasionally detected at levels less than the Practical Quantitation Levels (PQL), the effluent quality performance goals are set at the PQL. The PQL is determined by multiplying the USEPA published method detection limit or the Discharger's method detection limit approved by the Executive Officer with the factor five (5) for carcinogens or non-classified compounds, and ten (10) for non-carcinogens.

[5] *Working Together for an Affordable Clean Water Environment*. A final report presented to the California Regional Water Quality Control Board, Los Angeles Region by Water Quality Advisory Task Force, September, 1993.

State and Federal Regulations

28. Effluent limitations, toxic, and pretreatment effluent standards, established pursuant to Sections 208(b), 301, 302, 303(d), 304, 307, 403, and 405 of the Federal Clean Water Act and amendments thereto, are applicable to this discharge.

29. Pursuant to 40 CFR Part 403, the City developed and has been implemented a USEPA-approved industrial wastewater pretreatment program. This Order requires proper implementation of the pretreatment program.

30. Section 402(p) of the Federal Clean Water Act, as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. Pursuant to this requirement, in 1990, the USEPA promulgated 40 CFR Part 122.26 which established requirements for storm water discharges under NPDES program. To facilitate compliance with federal regulations, in 1992, the State Water Resource Control Board issued a statewide general permit [NPDES No. CAS000001, reissued on April 17, 1997] to regulate storm water discharges associated with industrial activity. The Los Angeles-Glendale Plant is covered by that general permit and its requirements are incorporated in this Order by reference.

31. The requirements contained in this Order were derived using best professional judgement and are based on the Basin Plan, Federal and State plans, policies, guidelines; and, as they are met, will be in conformance with the goals of the aforementioned water quality control plans, water quality criteria, and will protect and maintain existing and potential beneficial uses of the receiving water.

32. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with §21100, et. seq.), Division 13, Public Resources Code pursuant to California Water Code §13389.

The Regional Board has notified the Discharger and interested agencies and persons of its intent to renew waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to §402 of the Federal Clean Water Act, or amendment thereto, and shall take effect at the end of ten days from the date of its adoption provided the Regional Administrator of the USEPA has no objections.

IT IS HEREBY ORDERED that the City of Los Angeles, as operator of the Los Angeles-Glendale Plant, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Effluent Limitations

1. Wastes discharged shall be limited to tertiary treated municipal wastewater only, as proposed.

2. The discharge of an effluent with constituents in excess of the following limits is prohibited:

(a) Conventional and nonconventional pollutants:

		Discharge Limitations[1]		
Constituent	Units	Monthly Average	7-Day Average[2]	Daily Interim Maximum[3]
BOD_5 20°C	mg/L	20	30	45
	lbs/day[4]	3,340	5,000	7,510
Suspended solids	mg/L	15	40	45
	lbs/day[4]	2,500	6,680	7,500
Oil and grease	mg/L	10	--	15
	lbs/day[4]	1,670	--	2,500
Settleable solids	ml/L	0.1	--	0.2
Cyanide	ìg/L	5.2	--	22
Total residual chlorine	mg/L	--	--	0.1
Total dissolved solids	mg/L	--	--	950
	lbs/day[4]	--	--	158,600
Chloride	mg/L	--	--	190
	lbs/day[4]	--	--	31,710

Discharge Limitations[1]

Constituent	Units	Monthly Average	7-Day Average[2]	Daily Interim Maximum[3]
Sulfate	mg/L	--	--	300
	lbs/day[4]	--	--	50,080
Boron	mg/L	--	--	1.5
Fluoride	mg/L	--	--	2.0
Barium	mg/L	--	--	1.0
Detergents (as MBAS)	mg/L	--	--	0.5
Nitrite-N	mg/L	--	--	1
Nitrite+Nitrate-N	mg/L	--	--	8

(b) Toxic pollutants (metals):

		Discharge Limitations[1]	
Constituent	Units	Monthly Average	Daily Maximum[3]
Arsenic	ìg/L	--	50
Cadmium[5]	ìg/L	1	3.7
Chromium (VI)[6]	ìg/L	10	15
Copper[5]	ìg/L	11	17
Lead	ìg/L	2.5[5]	15
Mercury[7]	ìg/L	0.012	2.1
Nickel	ìg/L	--	100
Selenium[12]	ìg/L	5	10

	Discharge Limitations[1]	
	Monthly	Daily

Constituent	Units	Average	Maximum[3]
Silver[5]	µg/L	--	3.4
Zinc[5]	µg/L	100	110

(c) Toxic pollutants (organics):

		Discharge Limitations[1]	
Constituent	Units	Monthly Average	Daily Maximum[3]
Dieldrin	µg/L	0.0019	2.5
DDT[9]	µg/L	0.001	1.1
Endosulfan-alpha	µg/L	0.056	0.22
Endosulfan-beta	µg/L	0.056	0.22
Endrin	µg/L	0.0023	0.18
Lindane	µg/L	0.08	0.2
Toxaphene	µg/L	0.0002	0.73
PCBs[10]	µg/L	0.014	0.5
1,4-dichlorobenzene	µg/L	--	5
Bis(2-ethylhexyl)phthalate	µg/L	--	4
PAHs[16]	µg/L	--	0.2
Benzene	µg/L	--	1
1,2-dichloroethane	µg/L	--	0.5

		Discharge Limitations[1]	
Constituent	Units	Monthly Average	Daily Maximum[3]

Chloroform	ìg/L	--	100
Ethylbenzene	ìg/L	--	700
Tetrachloroethylene	ìg/L	--	5
Methylene chloride	ìg/L	--	5
Bromodichloromethane	ìg/L	--	100
Dibromochloromethane	ìg/L	--	100

Footnotes to discharge limitations:

[1] If the constituent limit is less than the method detection limit, compliance with the constituent limit shall be based on the PQL (Practical Quantitation Level). PQL shall be determined by multiplying the USEPA method detection limit (MDL) shown in Attachment 1 or the Discharger's performance MDL approved by the Executive Officer, with the factors five (5) for carcinogens or non-classified compounds, and ten (10) for non-carcinogens. If the constituent limit is between the method detection limit and PQL, compliance with the constituent limit may be based on a 95th percentile of a distribution of samples taken within a month rather than one single sample.

[2] As defined in Standard Provisions, Attachment N.

[3] The daily maximum effluent concentration limit shall apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring and Reporting Program (Attachment T).

[4] The mass emission rates are based on the plant design flow rate of 20 mgd.

[5] Concentrations expressed as total dissolved metals, and corresponded to a total hardness of 100 mg/L and water effect ratio of 1.0. For other conditions, the limits can be calculated by following 40 CFR §131.36(b)(2) and/or a water effect ratio study according to USEPA guidance documents and/or state protocols, if applicable.

[6] The discharger has the option to meet the hexavalent chromium limitations with a total chromium analysis. However, if the total chromium level exceeds the hexavalent chromium limitation, it will be considered a violation unless an analysis has been made for hexavalent chromium in replicate sample and the result shows within the hexavalent chromium limits. Concentrations are expressed as total dissolved hexavalent chromium and corresponded to a water effect ratio of 1.0. For other conditions, the limits can be calculated by following a water effect ratio study according to USEPA guidance documents and/or state protocols, if applicable.

[7] Concentrations expressed as total recoverable. The daily maximum concentartion corresponds to a water effect ratio of 1.0. For other conditions, the limit can be calculated by following a water effect ratio study according to USEPA guidance documents and/or state protocols, if applicable.

[8] Concentrations expressed as total recoverable.

[9] DDT shall mean the sum of the p,p' and o,p' isomers of DDT, DDD, and DDE. The PQL for DDT will be calculated on the basis of the MCL for DDT.

[10] PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.

[11] PAHs (polynuclear, aromatic hydrocarbons) shall mean the sum of acenaphtylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, ideno[1,2,3-cd]pyrene, phenanthrene, and pyrene. The PQL for PAHs will be calculated on the basis of the MCL for benzo[a]pyrene.

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3. The pH of wastes discharged shall at all times be within the range of 6.0 to 9.0.

4. The temperature of wastes discharged shall not exceed 100°F.

5. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions.

6. The arithmetic mean of BOD_5 20°C and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same time during the same period.

The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirements, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which analysis has been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.

8. The wastes discharged to water courses shall have received treatment equivalent to that of filtered wastewater. Filtered wastewater means an oxidized and coagulated wastewater that has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity of the filtered wastewater does not exceed any of

the followings: (a) a daily average of 2 Nephelometric turbidity units (NTUs); and (b) 5 NTUs more than 5 percent of the time (72 minutes) during any 24 hour period.

During storm events when the plant is treating more than 10% in excess of its treatment design capacity to minimize the potential of overflows in the sewage collection system downstream of the plant, the turbidity of the filtered wastewater shall not exceed any of the followings: (a) a daily average of 5 NTUs in the first 24 hours following the end of the storm event; (b) a daily average of 3 NTUs between 24 and 48 hours after the end of the storm event; and (c) 10 NTUs at any time.

"Oxidized wastewater" means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen. "Coagulated wastewater" means oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream of a filter by the addition of suitable floc-forming chemicals.

9. Acute Toxicity Limitation:

The acute toxicity of the effluent shall be such that the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test less than 70% survival.

If the acute toxicity limitation is violated three consecutive months, the Discharger shall conduct a toxicity identification evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

10. To protect underlying ground water basins, ammonia shall not be present in the wastes discharged at levels that, when oxidized to nitrate, pose a threat to ground water quality.

B. Effluent Quality Performance Goals

The discharger shall make best efforts to maintain the following effluent quality goals. Exceedance of any goal shall trigger an investigation by the Discharger on the causes of the exceedance. The Discharger shall report to the Regional Board on a quarterly basis any exceedance of these effluent quality goals. If exceedance of any particular goal persists on two succeeding quarterly monitoring periods, the second quarterly report shall contain the results of the Discharger's investigation including, but not be limited to, the description of the exceedance, cause(s) of the exceedance, and proposed corrective measures, if necessary.

The Executive Officer may modify any of the performance goals upon demonstration by the discharger that the change is warranted.

Constituent	Units	Effluent Quality Performance Goals[1] Monthly Average	Daily Maximum
BOD_5 20°C	mg/L	9	--
Suspended solids	mg/L	5	--
Oil and grease	mg/L	--	4
Arsenic	µg/L	--	7
Chromium (total)	µg/L	--	8
Iron	µg/L	--	200
Nickel	µg/L	--	42
Zinc	µg/L	--	78
Lindane	µg/L	--	0.043
Chloroform	µg/L	--	9.4
Ethylbenzene	µg/L	--	0.4
Bromodichloromethane	µg/L	--	5.8
Dibromochloromethane	µg/L	--	2.8
Remaining priority pollutants (Attachment 1)	µg/L	--	PQL[2]

Footnotes to effluent quality performance goals:

[1] Numerical effluent quality performance goals were derived statistically using effluent performance data from January 1993 through December 1997. Effluent values (x_i) are assumed to be lognormally distributed. The use of logarithmic transformation equation, $Y_j = Ln\ (x_j)$, results in effluent values (Y_i) that are normally distributed. Effluent quality performance goals are determined using the mean (u_n) and the standard deviation ($ó_n$) of the distribution of the average using the equation:

$$x_{95th} = \exp [u_n + (Z_{0.95})\ ó_n)\ ]$$

where

x_{95th} = Discharge effluent quality performance goal at the 95th percentile of the normal distribution.
u_n = Mean distribution of the average (transformed).
$Z_{0.95}$ = Z-value from the Table of Areas under the Standard Normal Curve: equal to 1.645 at 95 percent.
$ó_n$ = Standard deviation of the average transformed.
Exp is an exponential to the base "e" value = 2.7183

[2] PQL (Practical Quantitation Level) shall be determined by multiplying the USEPA published method detection limit (MDL) (Attachment 1) or the Discharger's MDL, approved by the Executive Officer, with the factor five (5) for carcinogens or non-classified compounds, and ten (10) for non-carcinogens.

C. Receiving Water Limitations

1. The temperature of the receiving water at any time shall not be raised above 80 °F as a result of the wastes discharged.

2. The pH of the receiving water shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged.

3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/L as a result of the wastes discharged.

4. The residual chlorine in the receiving water shall not exceed 0.1 mg/L as a result of the wastes discharged.

5. The fecal coliform concentration in the receiving water shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10% of total samples during any 30-day period exceed 400/100 ml as a result of the wastes discharged.

6. The wastes discharged shall not produce concentrations of toxic substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.

7. The wastes discharged shall not contain substances that result in increases in the BOD which adversely affect the beneficial uses of the receiving waters.

8. The wastes discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses of the receiving waters.

9. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.

10. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the receiving waters.

11. The wastes discharged shall not degrade surface water communities and populations, including vertebrate, invertebrate, and plant species.

12. The wastes discharged shall not result in problems due to breeding of mosquitos, gnats, black flies, midges, or other pests.

13. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.

14. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

15. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.

16. The wastes discharged shall not increase the turbidity of the receiving waters to the extent that such an increase causes nuisance or adversely affects beneficial uses.

D. Receiving Water Objectives

1. To protect aquatic life, ammonia in receiving waters shall not exceed concentrations specified in Tables 3-2 and 3-4 of the Basin Plan (Attachment 2) as a result of the wastes discharged, subject to the following conditions:

The Discharger will have until the year 2002 to: (a) make the necessary adjustments/improvements to meet these objectives, or (b) conduct studies leading to an approved less restrictive site specific objective for ammonia. If it is determined that there is an immediate threat or impairment of beneficial uses due to ammonia, the objectives in Tables 3-2 and 3-4 of Attachment 2 shall apply and the timing of compliance will be determined on a case-by-case basis.

2. There shall be no chronic toxicity in ambient waters as a result of the waste discharged.

If the chronic toxicity in the receiving water downstream of the discharge point during three consecutive months exceeds 1.0 TU_c in a critical life stage test, the Discharger shall determine if the cause of the exceedance is the wastes discharged. If it is determined that the wastes discharged caused the exceedance, the Discharger shall conduct a toxicity identification evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

II. PRETREATMENT REQUIREMENTS

A. This Order includes the Discharger's pretreatment program as previously submitted to this Regional Board. Any change to the program shall be reported to the Regional Board and USEPA in writing and shall not become effective until approved by the Executive Officer

and the USEPA Regional Administrator.

B. The Discharger shall implement and enforce its approved pretreatment program. The Discharger shall be responsible and liable for the performance of all pretreatment requirements contained in Federal Regulations 40 CFR Part 403, including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of the Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Board, USEPA, or other appropriate parties, as provided in the Federal Clean Water Act. The Regional Board or USEPA may initiate enforcement action against an industrial user for non-compliance with acceptable standards and requirements as provided in the Federal Clean Water Act and/or the California Water Code.

C. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307 (c), 307(d), and 402(b) of the Federal Clean Water Act. The Discharger shall cause industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

D. The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not be limited to:

(i) Implement the necessary legal authorities as provided in 40 CFR 403.8 (f) (1);

(ii) Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;

(iii) Implement the programmatic functions as provided in 40 CFR 403.8 (f) (2); and

(iv) Provide the requisite funding of personnel to implement the pretreatment program as provided in 40 CFR 403.8 (f) (3).

E. The Discharger shall submit annually a report to the Regional Board, the SWRCB, and the USEPA Region 9, describing the discharger's pretreatment activities over the previous twelve months. In the event the Discharger is not in compliance with any conditions or requirements of this permit, then the Discharger will also include the reasons for noncompliance and state how and when the Discharger shall comply with such conditions and requirements. This annual report is due on March 1 of each year and shall contain, but not be limited to, the information required in the attached Requirements for Pretreatment Annual Report (Attachment P) or approved revised version thereof.

III. REQUIREMENTS AND PROVISIONS

A. This order includes the attached Standard Provisions and General Monitoring and Reporting Requirements (Standard Provisions) (Attachment N). If there is any conflict between provisions stated herein and the Standard Provisions, those provisions stated herein prevail.

B. This Order includes the attached Monitoring and Reporting Program (Attachment T). If there is any conflict between provisions stated in Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.

C. The Discharger shall comply with the requirements of the State Water Resources Control Board's General NPDES Permit No. CAS000001 and Waste Discharge Requirements for Discharges of Storm Water Associated with Industrial Activities (Order No. 97-03-DWQ) (Attachment 3).

D. The Discharger shall comply with all applicable water quality objectives for the Los Angeles River, including the toxic criteria in 40 CFR Part 131.36.

E. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other causes, the discharge of raw or inadequately treated sewage does not occur.

F. This Order may be modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

G. This permit may be modified according to 40 CFR Part 122.62 if new regulations are adopted by the State of California, including the Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (California Toxics Rule) and implementation policies (State's Toxics Standards Implementation Policy).

H. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this order and permit, endangerment to human health, or the environment resulting from the permitted activity.

IV. EXPIRATION DATE

This Order expires on May 10, 2003.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code

of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

V. RESCISSION

Order No. 95-075, adopted by this Regional Board on June 12, 1995, is hereby rescinded, except for enforcement purposes.

I, Dennis Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on June 15, 1998.

DENNIS DICKERSON
Executive Officer